OCEAN GALES AND STORMS, JULY 1934

Vessel	Voyage		Position at time of lowest barometer		Gale	Time of lowest	Gale	Low- est ba-	Direc- tion of wind	Direction and force of wind	Direc- tion of wind	Direction and high-	Shifts of wind near time
	From—	То—	Latitude	Longitude	began	barom- eter	ended	rom- eter	when gale began	at time of lowest barometer	when gale ended	est force of wind	of lowest barometer
NORTH ATLANTIC OCEAN			. ,	. ,				Inches					
Lustrous, Br. S.S	Preston, England.	New York	44 18 N.	40 56 W.	July 1	3p, July 1	July 1		SSE	W, 4	s	SSE, 8	ssw-w.
Pres. Harding, Am. S.S. Cliffwood, Am. S.S.	Cobh Copenhagen _	New London, Conn.	48 16 N. 53 21 N.	33 23 W. 29 50 W.	July 2 July 9	4a, 2 10a, 9	July 2 July 9	29. 79 29. 67	w s	S, 7 SSW, 6	W 8	W, 8 SSE, 8	SE-SW. S-SSW-SSE.
Lara, Am. S.S	New Yorkdo Port Arthur_ Havre	San Juan do Manchester Norfolk	31 54 N. 32 45 N. 39 40 N. 41 12 N.	70 17 W. 70 55 W. 59 53 W. 57 00 W.	July 13 do July 15 do	8p, 13 11p, 13 10a, 15 2p, 15	July 14 July 13 July 15	29, 38 28, 94	S SE SE	S. 12	WSW NW W WSW	SW, 8 NE, 10 S, 12 SSW, 11	S-SW. SE-NE-NW SE-S-WNW. SSE-SSW- WSW.
Paris, Fr. S.SLekhaven, Du. S.SVeendam, Du. S.SSeatrain New York, Am. S.S.	do Antwerp Rotterdam Habana	New York Norfolk New York New Orleans.	42 40 N. 43 50 N. 50 20 N. 27 00 N.	54 09 W. 53 15 W. 14 50 W. 86 42 W.	do do July 20 July 23	2a, 16	July 16 do- July 20 July 23	29.60	S SSW N SW	SSW, 10 SW, 8 N, 8 SE, 3	N	SW, 11 WSW, 9 N, 8 SE, 8	S-SSW-WSW. SSW-SW-W. WNW-N. SW-SE.
Solana, Am. S.S W. S. Farish, Am. S.S	Galveston Corpus Chris- ti.	Baltimore	26 46 N. 26 22 N.	88 30 W. 92 04 W.	July 24	11p, 23 3p, 24	do July 24	29. 61 29. 50	SE	S, 8 SW, 10	Sssw	S, 8 SW, 10	N-SE-SSW. NW-SW-S.
Vacuum, Am. S.S	Port Arthur	Philadelphia.	29 18 N.	93 00 W.	do	4p, 24	do	29.68	NE	ESE, 8	SE	SE,8	NE-E-SE.
NORTH PACIFIC OCEAN													
Californian, Am. M.S Mobile City, Am. S.S	Los Angeles. Hilo, Hawaii.	Balboado	17 10 N. 14 32 N.	101 57 W. 105 25 W.	July 8 July 9	4p, July 8 5a, 9	July 9 July 10	29. 76 29. 53	ENE	ENE, 6 WSW, 8	SE SSW	E, 7. WSW, 8	ENE-E. NNW-WSW- SW.
Taisei Maru, Jap. S.S	Yokohama	Portland, Oreg.	46 00 N.	147 20 W.	July 14	11p, 14	July 14	² 29. 44	WNW.	WNW, 8	WNW.	WNW, 8	None.
Tascalusa, Br. S.S	Los Angeles Manilado(3)		25 49 N.	129 18 E.	July 13 July 14 July 18	5a, 15 3a, 16 2p, 18 5a, 19	July 16 July 15 July 18	29.31	SW WNW. SE SE	W,7 WSW,5 SE,7 E,1	W W SSE E	SW, 7 W, 8 SE, 9 SE, 7	Do. W-WSW. E-SE. SE-E.
Norway Maru, Jap. S.S Fernbrook, Nor. M.S Do	Victoria, B.C. Los Angelesdodo	Yokohama	51 45 N. 44 51 N.		July 23 July 27 July 30	4p, 23 Noon, 27.	July 23	² 30. 09 29. 66	SSE SW WSW	S,7SW,8	SSE SW W	SSE, 8 SW, 8 WSW, 9	S-N. SW-W. WSW-W.

1 Position approximate.

² Barometer uncorrected.

3 At fishing banks, out of San Diego.

NORTH PACIFIC OCEAN, JULY 1934 By Willis E. Hurd

Atmospheric pressure.—During July 1934, the greater part of the North Pacific Ocean, except the Tropics and far eastern waters, was under the influence of anticyclonic weather conditions. The Aleutian Low, so far as the average pressure for the month is concerned, was nonexistent in southern Alaskan waters, and no disturbances of importance developed over the northern part of the ocean. Pressure at St. Paul, in the Bering Sea, was 0.17 inch above the July normal, but at Juneau it was 0.06 below. These were the extreme July departures for the ocean as noted on table 1.

The average barometer (29.81 inches) at Naha, in the Nansei group, was 0.09 inch above the normal, despite the fact that abnormally low pressures prevailed there from the 13th to 19th, owing to the near proximity of a tropical cyclone.

Table 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, July 1934, at selected stations

Point Barrow 29.89 -0.03 30.14 2,3,25 29.40 Dutch Harbor 30.03 +.09 30.40 24 28.62 28.7 29.97 +.17 30.42 24 22.4 22.4 22.4 22.4 22.4 24.4 22.4 22.4 24.2 24.4 22.4 24.4 22.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 24.4 2	Stations	Average pressure	Depar- ture from normal	Highest	Date	Lowest	Date
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Dutch Harbor St. Paul Kodiak Juneau Tatoosh Island San Francisco Mazatlan Honolulu Midway Island Guam Manila Naha Chichishima	29. 89 30. 03 29. 97 30. 04 29. 99 30. 09 29. 87 30. 03 30. 09 29. 83 29. 76 29. 81 29. 91	-0.03 +.09 +.17 06 +.04 +.02 +.02 01 02 04 +.09	30. 14 30. 40 30. 42 30. 50 30. 39 30. 36 30. 10 29. 96 30. 14 30. 22 29. 90 29. 92 30. 02	24 24 1 2 10 29 3 3 29, 30 22, 23 30 22, 23, 30	Inches 29, 40 29, 62 29, 44 29, 62 29, 84 29, 78 29, 92 29, 94 29, 70 29, 52 29, 40 29, 70 29, 60	7 18 15, 16 15, 16 15 12 24 28 12 14 18 15 11, 16

Note.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

Cyclones and gales.—The generally quiet weather prevalent during June over the North Pacific Ocean continued through July, except that the eastern and western tropics showed somewhat more evidence of disturbed conditions.

In the extra-tropical area the greater number of depressions ran in high latitudes, except for a few comparatively shallow cyclones which proceeded eastward from Japanese waters. Of these Lows, only two caused recorded gales, one on the 19th of force 8 and the other on the 30th of force 9. Both occurred between 40° and 45° N., 155° and 170° E. Fresh gales, in addition, were experienced on the 23d, south of Dutch Harbor, and on the 14th, near 46° N., 147° W. That of the 14th was due to a depression, central near 50° N., 135° W., which developed on the 13th and withdrew northward on the 15th.

In Asiatic tropical waters a cyclone appeared at some distance southeast of the Nansei Islands on the 13th. It moved slowly westward until the 18th when, near the northern extremity of the island of Taiwan, it had a barometric depth of 29 inches. Thence it recurved northward and died out on the 23d in the Japan Sea. The cyclone was characterized as a typhoon on the Japanese weather maps. A ship report on the 15th, near 20° N., 129° E., recorded a maximum wind force of 8, and a report from Ishigashima Island on the 17th gave a similar velocity. These are the highest forces for the cyclone shown by our present records.

From the 17th to 19th a small depression moved in the neighborhood of the Ogasawara Islands, and in this disturbed area a southeast gale of force 9, lowest barometer 29.57, was reported on the 18th.

In Mexican west coast waters two disturbances, of which we have only brief record, likewise occurred. The first was noted southwest of Acapulco on the 8th and 9th, with a wind force of 7 from the east. Farther westward, on the 9th, the American S.S. Mobile City encoun-